

Regufoam® Vibration 220^{plus}

Standard forms of delivery, ex Lebanon, PA

Sheets

Thickness: 25 mm and 12.5 mm
 Custom thicknesses available on request
 Length: 16.4' (5,000 mm)
 Width: 59" (1,500 mm)

Max. static load
 4.1 psi

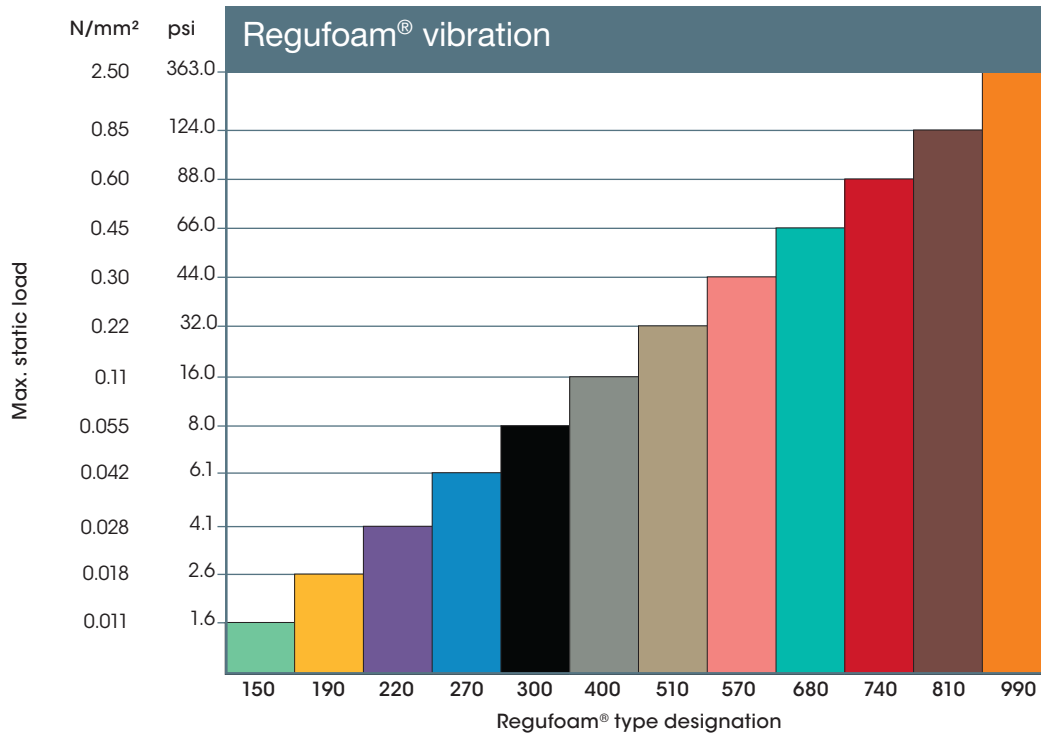
Peak loads (rare, short-term loads)
 up to 130.5 psi



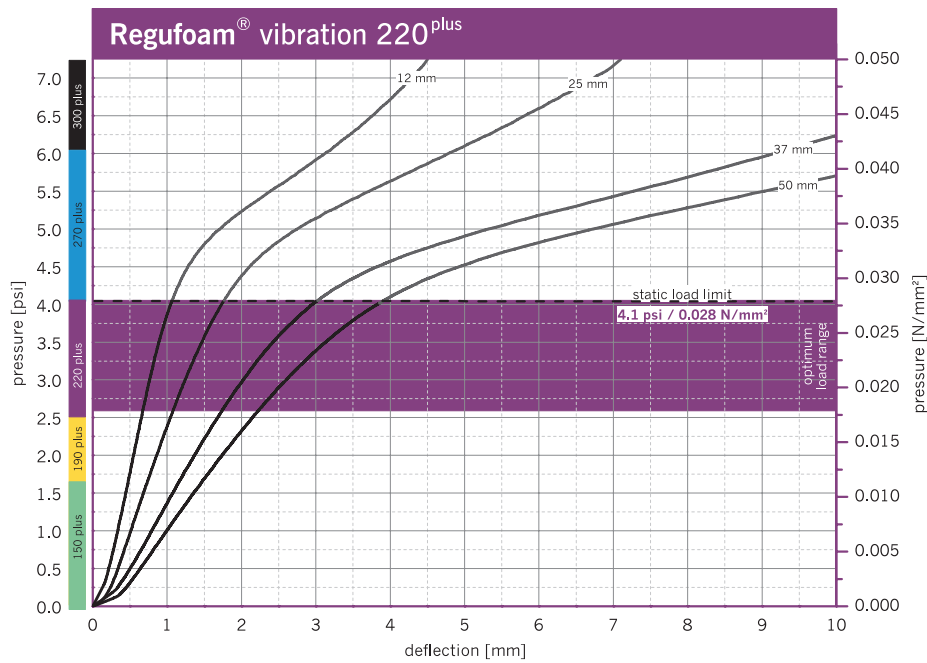
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Static modulus of elasticity	Based on EN 826	21.8 - 50.8 0.15 - 0.35	psi N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	50.8 - 104.4 0.35 - 0.72	psi N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.22	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	2.3	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	72.5 0.5	psi N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	180	%	
Tear resistance	Based on DIN ISO 34-1	12.0	lbs/in	
Sliding friction	BSW laboratory BSW laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	39	kPa	Compressive stress at 25 % deformation Test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	47	%	Depending on thickness, Test specimen h = 25 mm
Force reduction	DIN EN 14904	69	%	Depending on thickness, Test specimen h = 25 mm

Load Ranges



Load Deflection



Vibration Isolation

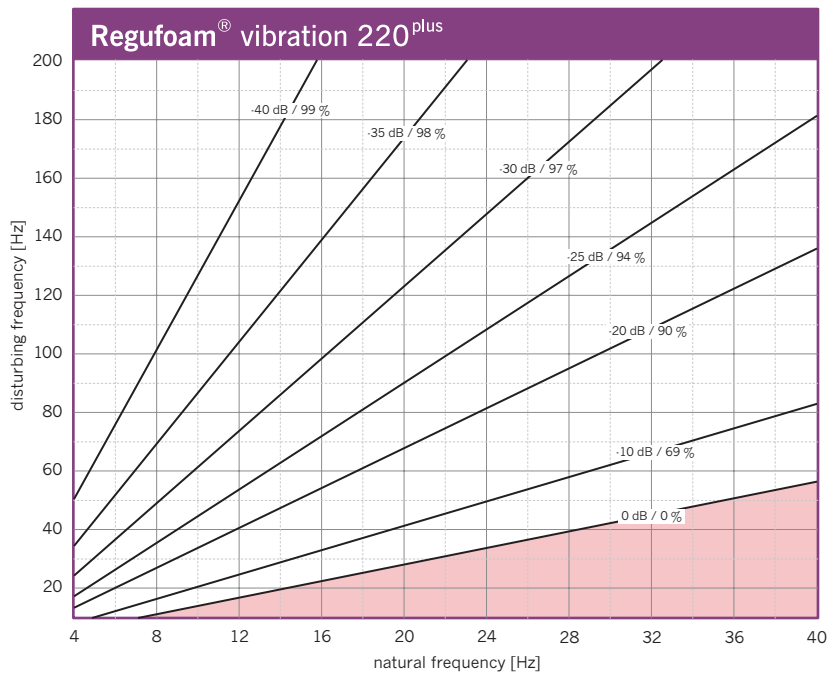
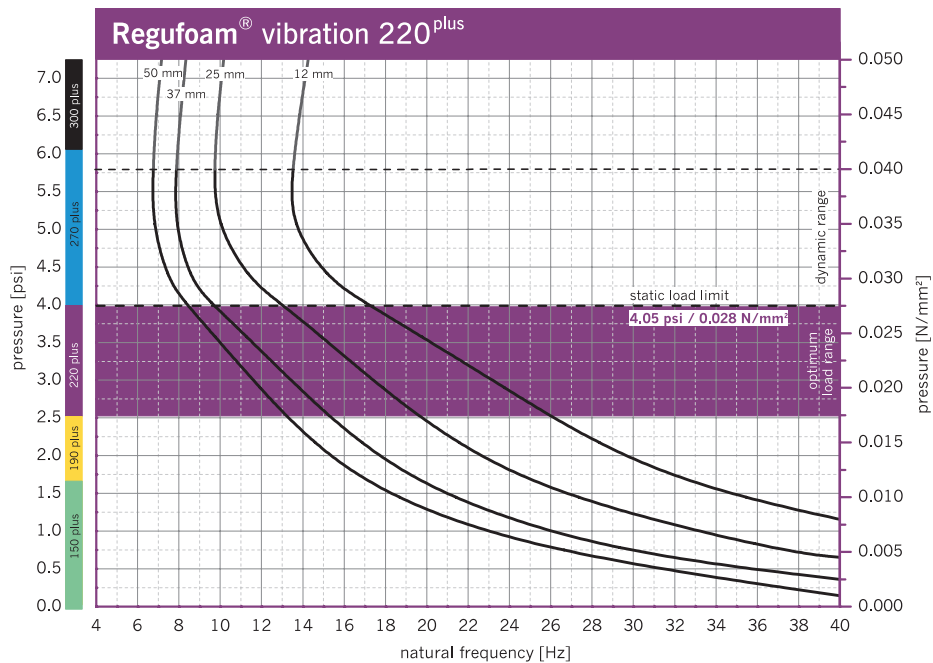


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 220 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 220^{plus}** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Modulus of Elasticity

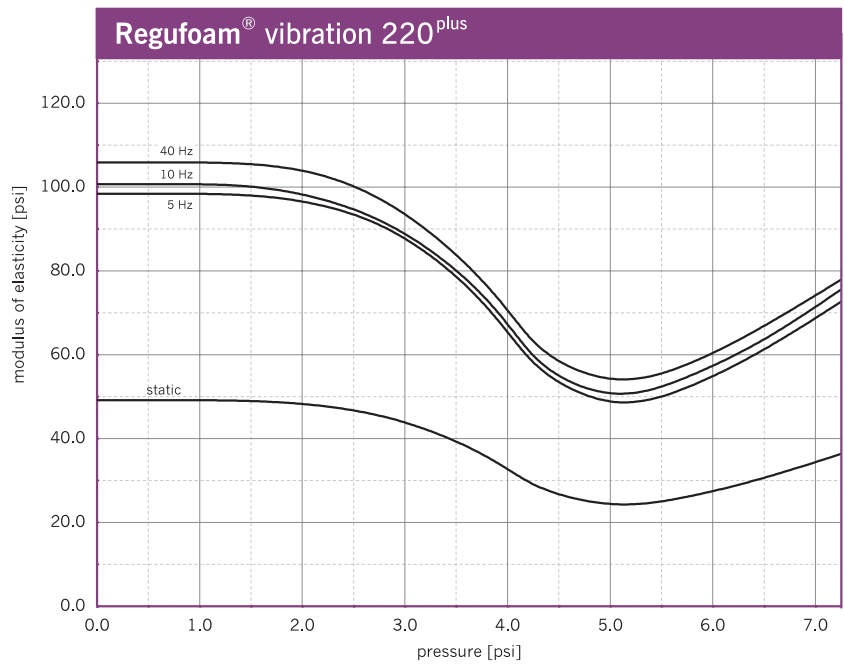


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

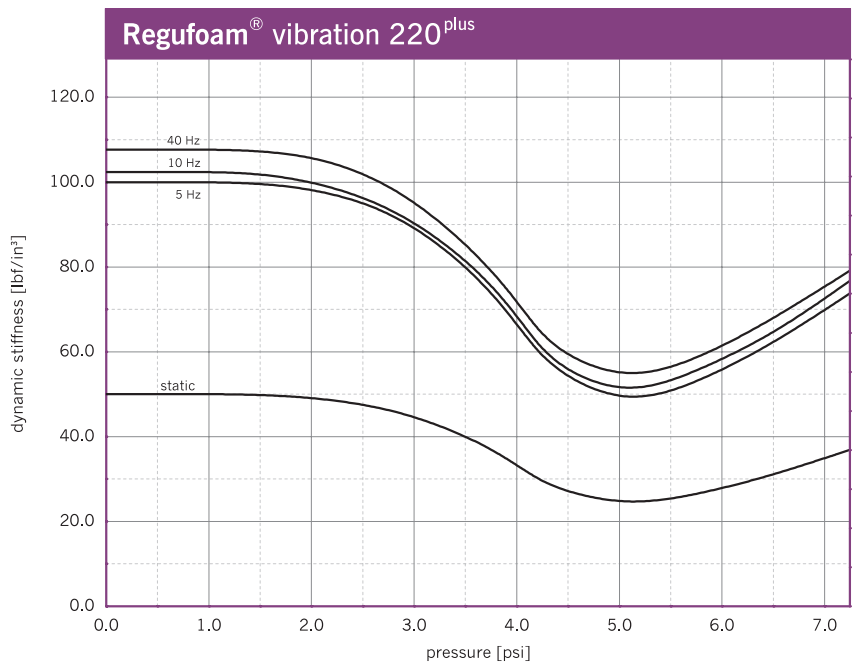
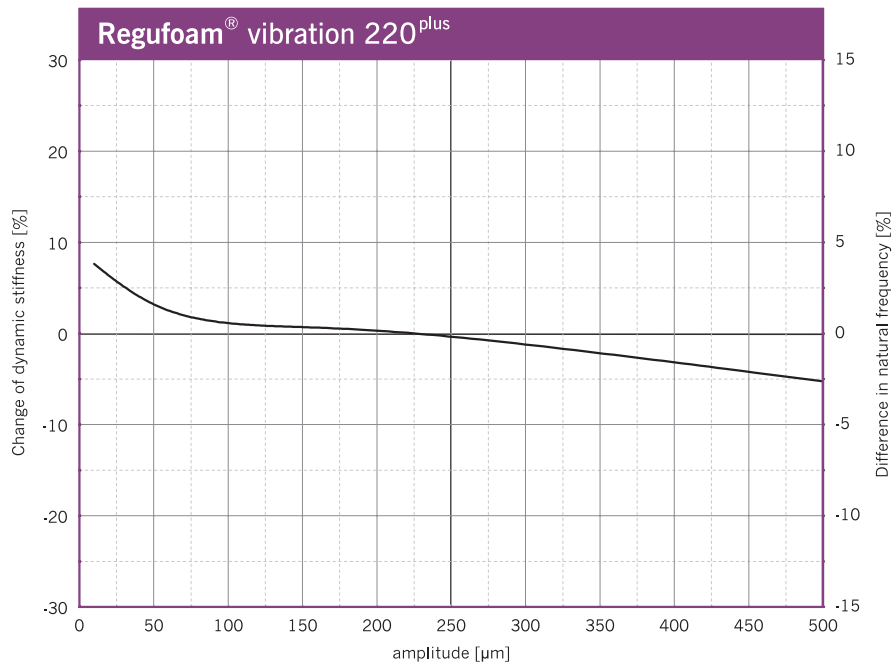
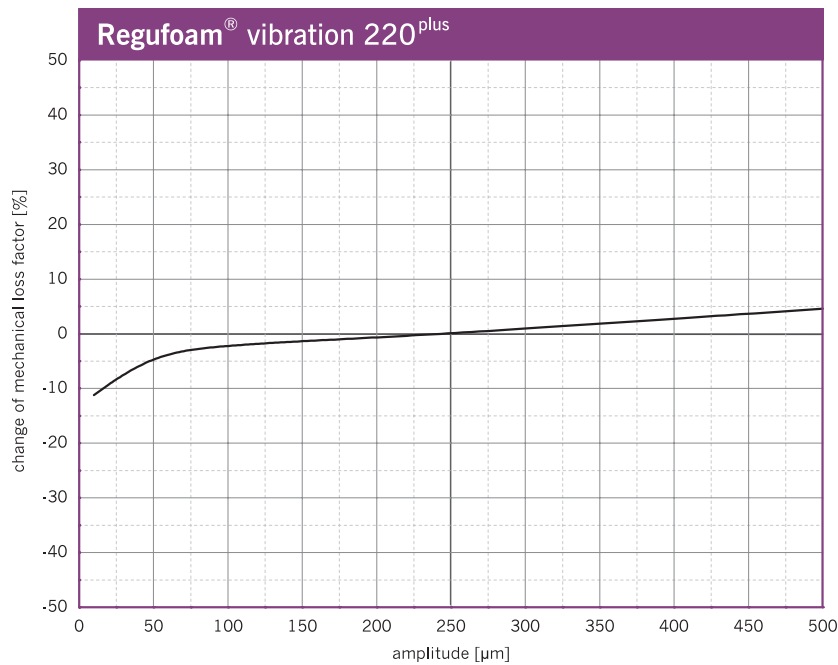


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimension of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Influence of Amplitude

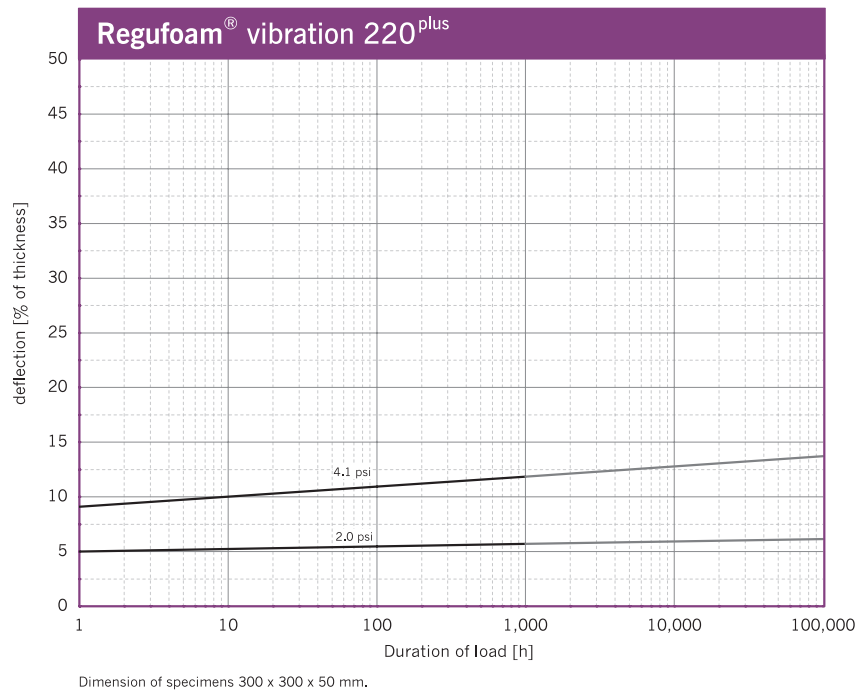


Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

Long-Term Creep Test



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